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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/646,673	08/21/2003	Kevin L. Beaman	108298715US	1020

25096 7590 09/28/2005

PERKINS COIE LLP
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EXAMINER

TUROC, DAVID P

ART UNIT	PAPER NUMBER
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1762

DATE MAILED: 09/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Advisory Action Before the Filing of an Appeal Brief	Application No. 10/646,673	Applicant(s) BEAMAN ET AL.	
	Examiner David Turocy	Art Unit 1762	

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 12 September 2005 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.
b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

AMENDMENTS

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
(a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);
(b) ☐ They raise the issue of new matter (see NOTE below);
(c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
(d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: _____. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).
5. ☐ Applicant's reply has overcome the following rejection(s): _____.
6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
7. ☒ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.
The status of the claim(s) is (or will be) as follows:
Claim(s) allowed: 2-11, 14 and 15.
Claim(s) objected to: _____.
Claim(s) rejected: 12, 13 and 16-21.
Claim(s) withdrawn from consideration: _____.

AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing of a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because:
See Detailed Action.
12. ☒ Note the attached Information Disclosure Statement(s). (PTO/SB/08 or PTO-1449) Paper No(s). 3/17/2005
13. ☐ Other: _____.

DETAILED ACTION

Information Disclosure Statement

1. The applicant has noted two references were not properly initialed by the examiner and requests a corrected IDS with the references initialed. The examiner notes the error and has attached a properly initialed IDS.

Response to Arguments

2. The applicant argues against the Park reference stating that Park fails to disclose depositing a first reaction product on a surface of the reaction chamber and depositing a second reaction product on the surface of the substrate at a second lower rate. The examiner agrees that Park discloses that the precoating process is *similar* to the thin film deposition except that the wafer is in the reactor, however, this disclosure of "similar" does not support the two processes always having the "same" operating conditions. Park continues to disclose the similarities associated with the two processes include the temperature of the wafer and/or the supply lines (paragraph 0095). Park discloses one method for the precoating process is continuously flowing ammonia and one method for wafer coating step is pulsing the ammonia (paragraphs 65-67 and 94). Therefore Park reasonably suggests to one of ordinary skill in the art that the method includes first continuously flowing ammonia in the precoating step and then subsequently pulsing the ammonia to form a thin film, where the preceding method

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inherently results in the precoating having a higher deposition rate as discussed in the office action date December 16, 2004.

The applicant argues against the Park reference stating that the reference, stating that while Park may suggest a continuous flow followed by a pulsed flow, such a condition does not necessarily result in a high deposition rate. The examiner respectfully disagrees. As discussed in Park, at paragraph 0065-0066, the pulsed wafer coating process includes, introducing a TiCl_4 gas into the reaction chamber with argon, stopping the flow of the TiCl_4 gas so as to compress the TiCl_4 layer using a continuous flow of argon. Park discloses subsequently introducing NH_3 and argon gas into the reaction chamber and stopping the flow of the NH_3 , but continually flowing the argon into the reaction chamber to react the gases to form a TiN layer on the wafer. In marked contrast, Park discloses providing a precoat, at paragraph 0094, by continuously flowing the NH_3 and argon into the reaction chamber, while pulsing the TiCl_4 , does not require the step of excluding the NH_3 gas for an amount of time, while continually flowing the argon gas. Therefore, it is the examiners position that the wafer coating process, as taught by Park, will have a lower deposition rate because such a process requires exclusion of one reactant for a period of time and such a period of time within the repeated sequence will result in a lower deposition rate. During patent examination, the pending claims must be "given the broadest reasonable interpretation consistent with the specification" by giving words their plain meaning unless the specification provides a clear definition. See *In re Prater* 415 F.2d 1393 1404-05 162 USPQ 541 and *In re Zletz* 893 F.2d 319, 321, 13 USPQ2d 1320.


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Turocy whose telephone number is (571) 272-2940. The examiner can normally be reached on Monday-Friday 8:30-6:00, No 2nd Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Meeks can be reached on (571) 272-1423. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

David Turocy
AU 1762



TIMOTHY MEES
SUPERVISORY PATENT EXAMINER